

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A face recognition method for recognizing face portions in an image based on image data of the image, comprising:

a detection step of detecting, in the image, eye portions which have undergone a predetermined color change, based on the image data;

a recognition step of recognizing face portions in the image based on the eye portions detected in the detection step; and

an identification step of identifying an individual person being photographed based on ~~a face in the~~ the face portions recognized in the image; and

an inducing step of inducing the predetermined color change to occur in the eye portions of the image.

2. (original): The face recognition method according to claim 1, wherein the detection step detects red-eye portions in the image.

3. (currently amended): A face recognition apparatus which recognizes face portions in an image based on image data of the image, comprising:

a detection section which detects, in the image, eyes which have undergone a predetermined color change, based on the image data;

a recognition section which recognizes face portions in the image based on the eyes detected by the detection section; and

an individual recognition section which identifies an individual person being photographed based on a-face in the face portions recognized in the image,

wherein the predetermined color change is induced to occur in the eyes of the image.

4. (currently amended): A face extraction method for extracting face portions from an image and generating facial images based on image data of the image, comprising:

a detection step of detecting, in the image, eye portions which have undergone a predetermined color change, based on the image data;

a recognition step of recognizing face portions in the photographic image based on the eye portions detected in the detection step;

a correction step of correcting the color change in the eye portions detected in the detection step;

a face image generating step of generating facial images by extracting, from the image, the face portions which have been recognized in the recognition step and whose color change has been corrected in the correction step; and

an identification step of identifying an individual person being photographed based on a-face in the generated facial images; and

an inducing step of inducing the predetermined color change to occur in the eye portions of the image.

5. (currently amended): A face extraction method for extracting face portions from an image and generating facial images based on image data of the image, comprising:

a detection step of detecting red-eye portions in the image, based on the image data;

a recognition step of recognizing face portions in the image based on the red-eye portions detected in the detection step;

a correction step of correcting the red-eye portions detected in the detection step;

a face image generating step of generating facial images by extracting, from the image, the face portions which have been recognized in the recognition step and whose red-eye portions have been corrected in the correction step; **and**

an identification step of identifying an individual person being photographed based on a face in the generated facial images; **and**

an inducing step of inducing the predetermined color change to occur in the eye portions of the image.

6. (currently amended): An image pickup apparatus which photographs a subject and generates photographic image data of a photographic image, comprising:

a detection section that detects, in the photographic image, eye portions which have undergone a predetermined color change, based on the image data;

a recognition section that recognizes face portions in the photographic image based on the eye portions detected by the detection section;

a correction section that corrects the color change in the eye portions detected by the detection section;

a face image generating section that generates facial images by extracting, from the photographic image, the face portions which have been recognized by the recognition section and whose color change has been corrected by the correction section;

an individual recognition section which identifies an individual person being photographed based on a face in the generated facial images,

wherein the predetermined color change is induced to occur in the eye portions of the image.

7. (original): The image pickup apparatus according to claim 6, wherein the detection section detects red-eye portions in the image and the correction section corrects the red-eye portions detected by the detection section.

8. (previously presented): The face recognition method according to claim 1, wherein the detection step of detecting eye portions which have undergone a predetermined color change includes comparing a pixel value of the image data with a reference pixel value which corresponds to the predetermined color change.

9. (previously presented): The face recognition method according to claim 8, wherein the reference pixel value is a red reference value or a gold reference value.

10. (previously presented): The face recognition method according to claim 1, wherein the predetermined color change is a gold-eye occurrence.

11. (previously presented): The face recognition apparatus according to claim 3, wherein the detection section which detects eyes which have undergone a predetermined color change, compares a pixel value of the image data with a reference pixel value which corresponds to the predetermined color change.

12. (previously presented): The face recognition apparatus according to claim 11, wherein the reference pixel value is a red reference value or a gold reference value.

13. (previously presented): The face recognition apparatus according to claim 3, wherein the predetermined color change is a gold-eye occurrence.

14. (previously presented): The face extraction method according to claim 4, wherein the detection step of detecting eye portions which have undergone a predetermined color change includes comparing a pixel value of the image data with a reference pixel value which corresponds to the predetermined color change.

15. (previously presented): The face extraction method according to claim 14, wherein the reference pixel value is a red reference value or a gold reference value.

16. (previously presented): The face extraction method according to claim 4, wherein the predetermined color change is a gold-eye occurrence.

17. (previously presented): The image pickup apparatus according to claim 6, wherein the detection section that detects eye portions which have undergone a predetermined color change, compares a pixel value of the image data with a reference pixel value which corresponds to the predetermined color change.

18. (previously presented): The image pickup apparatus according to claim 17, wherein the reference pixel value is a red reference value or a gold reference value.

19. (previously presented): The image pickup apparatus according to claim 6, wherein the predetermined color change is a gold-eye occurrence.

20. (currently amended): The face recognition method according to claim 1, wherein the identification step is performed ~~only if when~~ the eye portions which have undergone the predetermined color change are detected.

21. (currently amended): The face recognition method according to claim 20, wherein the identification step includes:

searching for face images stored in a storage section that match ~~the-a face in the~~ recognized face portions; and
acquiring identification information stored in the storage section which is associated with a matched face image.

22. (previously presented): The face recognition method according to claim 1, wherein the identification step is performed based on a result of the detection step, in which the eye portions which have undergone the predetermined color change are detected.

23. (currently amended): The face recognition method according to claim 22, wherein the identification step is performed only if when the predetermined color change is detected.

24. (previously presented): The face recognition method according to claim 1, wherein the individual person is identified according to unique identification information which corresponds to the individual person.

25. (new): The image pickup apparatus according to claim 6, further comprising:
an image taking lens; and
a flash unit which emits a flash during a photography operation and is disposed on the face recognition apparatus in a proximity to the image taking lens which induces the predetermined color change in the eyes to occur

26. (new): The image pickup apparatus according to claim 25, wherein the flash unit is disposed on the face recognition apparatus directly above and in alignment with the image taking lens, and the proximity of the flash unit to the image taking lens induces the predetermined color change in the eyes during a photography operation.

27. (new): The face recognition method according to claim 1, wherein the predetermined color change is induced intentionally in the inducing step.